

ABSTRACT OF THE DISCLOSURE

INTEGRATED OPTICS SAMPLING DEVICE AND ITS FABRICATION
METHOD

A sampling device includes a substrate and a wave guide core in the substrate. The wave guide core is configured to transport a light wave. The sampling device further includes an optical cladding in the substrate. At least a portion of the cladding surrounds at least a portion of the core in a zone of interaction. The zone includes a grating configured to couple, in the cladding, a part of the light wave to form a coupled wave. A refractive index of the cladding is different from a refractive index of the substrate and the refractive index of the cladding is lower than a refractive index of the core at least in a part of the cladding adjacent to the core in the zone of interaction.